

Abstract

A total ankle replacement system, novel surgical method for total ankle replacement, and novel surgical tools for performing the surgical method are described. The total ankle replacement system includes the calcaneus in fixation of a lower prosthesis body, thereby significantly increasing the amount of bone available for fixation of the lower prosthesis body and allowing the lower prosthesis body to be anchored with screws. The total ankle replacement system further includes a long tibial stem which can also be anchored into the tibia with, for example, screws, nails, anchors, or some other means of attachment. The novel surgical arthroscopic method allows introduction of ankle prostheses into the ankle joint through an exposure in the tibial tubercle. Various novel surgical instruments, such as a telescoping articulating reamer and a talo-calcaneal jig, which facilitate the novel surgical method, are also described.